

numerals 424, 434, 444 have been added to better illustrate the subject matters of the instant invention without including any new matter.

### **Response to Rejection of Claims 1 to 20 under 35USC112**

3. The applicant submits that the amended claims 1 to 4, 9 to 10, and 13 to 18 have been amended to particularly point out and distinctly claim the subject matter of the instant invention, as pursuant to 35USC112. The limitation previously recited in claims 5 to 8 is added to the amended claim 1 and the claims 5 to 8, 11, 12, 19, and 20 have been cancelled.

### **Response to Rejection of Claims 1 to 20 under 35USC103**

4. The Examiner rejected claims 1 to 12 over Wiles in view of Wakimoto and rejected claims 13 to 20 over Wiles in view of Wakimoto and further in view of Goddard, but these patents fail to suggest the invention of claims 1 to 20, including the following distinctive features:

- (a) a supporter body having a predetermined thickness, said supporting body having at least two vertical connecting holes and **at least two inclined supporting holes** provided therethrough, each of said inclined supporting holes being inclined in different direction;
- (b) said at least two inclined supporting holes being respectively extended from top to bottom through said at least two vertical connecting holes to form at least two supporting through slots, wherein **an axis of said vertical connecting hole of each of said supporting through slots is intersected with an axis of said respective inclined supporting hole;**
- (c) **a diameter of each of said vertical connecting holes being substantially equal to a diameter of each of said stems and said inclined supporting holes;**

- (d) each of said supporting through slots providing an **upper supporting groove surface** and a **lower supporting groove surface** which are **inclined in opposite direction**, said at least two elongated stems (are) penetrated through and pivotally connected at said at least two supporting through slots respectively;
- (e) each of said elongated stems being capable of to **inclinedly rest and be supported by said upper supporting groove surface and said lower supporting groove surface** of said respective inclined supporting hole so as to form a cross construction.

According to the above features of the present invention, when a downward loading force is applied to each of said stems, **a portion of a lower surface of said respective stem is rested and supported by said upper supporting groove surface and a portion of an upper surface of said respective stem is rested and supported by said lower supporting groove surface.**

5. The Examiner appears to reason that since Wiles teaches a cross-member D adapted to connect at least two elongated stems of furniture including oppositely inclined holes and a vertical connecting hole such that the elongated stems can be folded. it would have been obvious to one skilled in the art to modify Wiles with Wakimoto and/or Goddard that each teaches elongated members pivotally attached to a cross member to be old and well known in the art.

However, Wiles merely describes a friction-block D for a camp-stool, which has four openings E , through which the legs pass. The said openings have tapering sides E' and E'', against which the legs bind when opened (column 1, lines 42 to 46). In other words, Wiles in fact merely suggests four openings each having a tapering sides but not the circular holes or slots fitting with the diameter of the respective stem as claimed in the presently amended claim 1.

Also, Wakimoto, on the other hand, only suggests a basic framework plate 2 having four apertures 3 perforated at four predetermined positions thereon for inserting each of the rods to be passed therethrough respectively (column 2, lines 13 to 16).

Moreover, Goddard simply teaches the use of an encircling ring 10, wherein in an intermediate position of its length has welded or brazed thereto the ends of a U-shaped loop 9 of limbs of which will constitute the projections to engage the encircling ring 10 (column 3, lines 22 to 26).

6. The applicant respectfully submits that all the cited arts fail to suggest a rigid cross-member supporter as claimed in the present claims. Please referring to Fig. 6 of Wiles, Fig. 3 of Wakimoto, and Fig. 4 of Goddard, the stems supported by the friction-block D, the basic framework plate 2 or the encircling ring 10 are still free to move in all directions since the size of the openings, apertures or ring is not fitted with the diameter of the stem. The room formed around the stems results unsteady and inrigidity construction of the stool or foldable chair that would greatly reduce the service life span of the products.

Moreover, each of the stems or rods in the cited arts is merely in line contact with the supporter (i.e. by the friction-block D, the basic framework plate 2 or the encircling ring 10 in the cited arts), so that the stem is supported by a very limited area of the supporter that substantially in contact with the stem, as shown in the red circle marks of the attached drawings of the cited arts. In other words, the downward loading force applied to the stems will all be stressed at such limited contacting line area. It is apparent that the structure disclosed in the cited arts is not durable, rigidly and firmly constructed, and difficult to operate in easy and fast manner.

7. However, in view of the present invention, the supporter body has at least two inclined supporting holes respectively extended from top to bottom through at least two vertical connecting holes to form at least two supporting through slots, wherein an axis of said vertical connecting hole of each of said supporting through slots is intersected with an axis of said respective inclined supporting hole. Moreover, a diameter of each of said vertical connecting holes being substantially equal to a diameter of each of said stems and said inclined supporting holes. Therefore, *each of said supporting through slots providing an upper supporting groove surface and a lower supporting groove surface which are inclined in opposite direction*, so that each of said elongated stems is capable of to *inclinedly rest and be supported by said upper supporting groove*

**surface and said lower supporting groove surface** of said respective inclined supporting hole so as to form a cross construction.

Accordingly, the stems can be rigidly and firmly supported by the supporter of the present invention without unwanted movement in lateral direction because the stems are fittedly guided and penetrated through the supporting through slots respectively. Thus, the stem can smoothly rotate between the open condition as shown in Figs. 4 and 7 and a folded condition as shown in Figs. 3 and 5.

Besides, each stem is supported by the upper supporting groove surface as well as the lower supporting groove surface which provide much larger contact area with the respective stem and thus performing a lot better supporting ability to the downward loading. The overstress at thin area of the cited arts is avoided in the instant invention. Furthermore, both the upper and lower supporting groove surfaces are curved surfaces that fittingly with the curvature of the respectively stem for full contact and supporting.

8. None of the above unexpected functions and features of the present invention are found in the description of the cited arts, Wiles, Wakimoto, and Goddard. Therefore, the applicant respectfully submits that this is clearly **not** a proper basis for combining references in making out an obviousness rejection of the present claims. Rather, the invention must be considered as a whole and there must be something in the reference that suggests the combination or the modification. See Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984) ("The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination"), In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984), ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), ("Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.")

In the present case, there is no such suggestion. Wiles, Wakimoto and Goddard perform very different types of cross-member supporter, i.e. the friction-block D, the basic framework plate 2 or the encircling ring 10 respectively.

In any case, even combining Wiles, Wakimoto and Goddard would not provide the invention as claimed -- a clear indicia of nonobviousness. Ex parte Schwartz, slip op. p.5 (BPA&I Appeal No. 92-2629 October 28, 1992), ("Even if we were to agree with the examiner that it would have been obvious to combine the reference teachings in the manner proposed, the resulting package still would not comprise zipper closure material that terminates short of the end of the one edge of the product containing area, as now claimed."). That is, modifying Wiles with Wakimoto and Goddard, as proposed by the Examiner, would not provide the inclined supporting holes to inclinedly intersecting with the vertical supporting holes respectively to forms the upper and lower supporting groove surfaces to substantially increase the supporting contact area with the stems penetrated therethrough for better supporting effect and easier and faster operation.

9. Indeed, the only mention of such supporting through slots with upper and lower supporting groove surfaces is in applicants own specification and claims. Accordingly, it appears that the Examiner has fallen victim to the insidious effect of a hindsight analysis syndrome where that which only the inventor taught is used against the teacher in *W.L Gore and Associates v. Garlock, Inc.*, 220 USPQ 303, 312-313 (Fed. Cir. 1983) cert. denied, 469 U.S. 851 (1984). Accordingly, applicants believe that the rejection of claim 10 to 20 is improper and should be withdrawn.

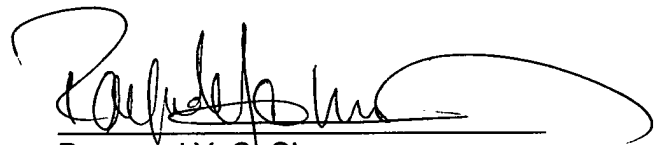
10. Applicant believes that neither Wiles, Wakimoto nor Goddard, separately or in combination, suggest or make any mention whatsoever of using the inclined supporting holes to intersect with vertical supporting holes respectively to form the curved upper and lower supporting groove surfaces, as recited in the amended claim 1.

**The Cited but Non-Applied References**

11. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

12. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the objection are requested. Allowance of claims 1-4, 9-10, and 13-18 at an early date is solicited.

Respectfully submitted,



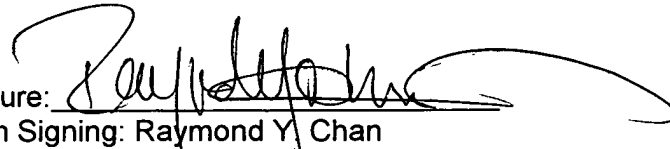
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